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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/035,612 03/05/98 YUZAWA

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000530 TM02/0119  
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EXAMINER

BROWN, R

ART UNIT

PAPER NUMBER

2611

DATE MAILED:

01/19/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/035,612

Applicant(s)

Yuzawa

Examiner

Reuben M. Brown

Group Art Unit

2611



☒ Responsive to communication(s) filed on Oct 30, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 3, 4, and 7-26 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 3, 4, and 7-26 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Jan 6, 2000 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 9-26, 3-4 & 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz, (U.S. Pat # 5,978,855), in view of Russo (U.S. pat # 5,765,113).

Considering claims 9 & 19, the claimed data reception device and method designed to receive digital signals comprising a program software detecting means for detecting data of program software in an ordinary receiving mode wherein the program software is executed to control the data reception device, reads on Metz which discloses that software applications are transmitted from a transmitter to a user's terminal device, (Abstract). In Metz the downloaded programming software which extends the functionality of the user's terminal device, i.e controls

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the terminal device, Abstract & col. 9, lines 55-67. In order for the terminal device to operate the extended downloaded software application it must necessarily detect the instant program software as required in the claim. The claimed feature of the program software being multiplexed in the digital data is met by Metz, (col. 8, lines 31-48). Metz also teaches storing the downloaded, extracted program software (col. 22, lines 21-25).

However, Metz does not discuss the claimed subject matter relating to signal quality detection. Nevertheless, at the time the invention was made, one of ordinary skill in the art would have been motivated to modify Metz to include signal quality detection means for the well known advantage of ensuring that the users receive at least a certain minimum of reception quality. Furthermore, at the time the invention was made it was well established in the art of quality control of data reception to apply at least one of several well known techniques to maintain signal quality such as switching to a different channel, when the noise or error rate exceeds a certain threshold on the given channel. For instance, Russo teaches that an RF transceiver includes a capability to apply corrective action such as, at least delay communication with the transmitter, i.e stop receiving data when the signal quality is below a certain threshold, see Abstract & col. 2, lines 32-36. This feature reads on the claimed recitation of only storing program software when the average signal quality is better than a certain threshold, since once the receiver does not have communication with the transmitter, it is not receiving data and thus is not storing data. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify

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Metz, to include a signal quality detection and correction algorithm, for the desirable improvement maintaining a least certain level of reception quality as taught by Russo.

As for the additional claimed feature of the detecting means detection quality levels in a predetermined period of time, it would have been obvious for one ordinary skill in the art to extend the detection period to any particular length, such that the longer the period, the higher the level of accuracy that the system will have since the data will receive more sampling or testing. Regarding the claimed feature of calculating an average quality level, Russo calculates or measures an average BER, which is referred to as the actual BER, see col. 4, lines 35-39. This actual BER is compared to an expected BER in order to determine whether the corrective action discussed above will be taken.

Considering claims 10 & 20, the software programs in both Metz and Russo are identified by an identifier, such that the receiving device uses it in order to extract the particular program software from the data stream, see Metz (col. 8, lines 61-67; col. 12, lines 1-20).

Considering claims 11 & 21, it was well known in the art to include at least the version of a software application, at least for the benefit of notifying the system when the instant software application should be upgraded.

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Considering claims 12 & 22, the detecting means in Russo is used to control whether the receiver will delay/cutoff communication with the transmitter.

Considering claims 13-14, see Metz col. 22, lines 21-25.

Considering claims 15 & 23, Official Notice is taken that buffer technology was well known in the art at the time the invention was made. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to utilize buffers to temporarily store portions of the received data as prior to being written in the main non-volatile memory, at least for the known advantage of more efficiently utilizing the memory.

Considering claims 16 & 24, Metz utilizes MPEG-2 technology.

Considering claims 17 & 25, Metz is directed to an application program.

Considering claims 18 & 26, Russo is directed to detecting the BER.

Considering claims 3 & 7, although Metz and Russo do not discuss displaying the quality of reception on a GUI, it would have been obvious for one of ordinary skill in the art to utilize the

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well known GUI technology at least for the desirable benefit of informing the user, at least so that he may override the operation determined by the system.

Considering claims 4 & 8, Metz is directed to digital broadcast utilizing MPEG technology.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 9 & 19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Grau, Tsuda, Tanaka      Disclose various methods of signal quality detection and correction algorithms.

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**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-6306, (for formal communications intended for entry)

**Or:**

(703) 308-6296 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (703) 305-2399. The examiner can normally be reached on Monday thru Friday from 830am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.



**ANDREW FAILE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**